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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,026	07/31/2003	Jay Lahti	P-11616.00	9661

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MEDTRONIC, INC.
710 MEDTRONIC PARKWAY NE
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MINNEAPOLIS, MN 55432-5604

EXAMINER

ALTER, ALYSSA M

ART UNIT	PAPER NUMBER
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3762

DATE MAILED: 06/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/632,026

Applicant(s)

LAHTI ET AL.

Examiner

Alyssa M Alter

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/22/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

1. Claims 1-48 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-28 of copending Application No. 10/632058 (US Patent Publication 20050027327 A1).

Although the conflicting claims are not identical, they are not patentably distinct from each other because both have a connector assembly for detachably connecting a lead to an implantable medical device, comprising a deflectable connector clip including a first arm, a second arm, the connector clip capable of being deflected from a first position corresponding to a first relative position of the first arm and the second arm to a second position corresponding to a second relative position of the first arm and the second arm; and a housing having a first member and a second member, the first member formed to be fixedly engaged with the second member to enclose the

connector clip within the housing, wherein the connector clip is positioned within one of the first member and the second member.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

2. Claims 1-48 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-30 of copending Application No. 10/632028 (US Patent Publication 20050027326 A1). Although the conflicting claims are not identical, they are not patentably distinct from each other because both have a connector assembly for detachably connecting a lead to an implantable medical device, comprising a deflectable connector clip including a first arm, a second arm, the connector clip capable of being deflected from a first position corresponding to a first relative position of the first arm and the second arm to a second position corresponding to a second relative position of the first arm and the second arm; and a housing having a first member and a second member, the first member formed to be fixedly engaged with the second member to enclose the connector clip within the housing, wherein the connector clip is positioned within one of the first member and the second member.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the

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art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 13-16, 29-32 and 45-48 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification, while being enabling for a first and a second flange, lacks description for a third flange. The examiner is unsure where the third flange is specifically located and the purpose it serves since it is not reference^d within the specification. dy

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-3, 5-11, 17-19 and 21-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Lim (US 5,769,671). Lim discloses a connector spring is radially deflectable and used to compress and engage two axially orientated electrical conductors together. "The spring is a metallic member having a general square shape as defined by four opposed sides each connected by a corner portion interposed therebetween and facing the central axis, and the spring on each side thereof having deformed portions which extend inwardly beyond the respective side face thereof and

toward the central axis”(col. 2. lines 34-39). In figure 5, the examiner considers the contact spring to be a clip with 23b as the first arm, 23d as the second arm, 23c as the top portion and 23a or the space between the two arms to be the bottom. The spring's first arm and second arm both have inner sidewalls that are adjacent to each other. It is recognized that springs resist deformation from their relaxed condition. As a result, the sidewalls will inherently engage against each other when they are deformed from their relaxed state, which the examiner considers the first position, to another position. Also, since the spring is a metallic spring used to enhance electrical contact, the examiner considers it to be inherently electrically conductive.

“The connector more specifically comprises an elongated housing extending along a central axis, the housing has a generally cylindrical opening extending coaxially with the central axis. The opening in the housing is defined by first and second cylindrical surfaces each defined by a first diameter. An annular radially directed gap is disposed within the opening and is disposed axially between the first and second cylindrical surfaces, with the annular gap extending radially outwardly from the axis and beyond each of the first and second cylindrical surfaces. The gap has a given width as measured along the axis extending in the direction parallel thereto. A contact spring is provided and has a generally closed shape and is of a width sufficient to be received within the gap and has portions thereof extending inwardly toward the axis and into the opening”(col. 2, lines 12-26). “The opening 10 in the housing 4 has an interrupted inner surface as defined by concentric first and second axially spaced cylindrical inner surfaces 12 and 14, respectively, together defining an annular radially directed gap 16

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therebetween”(col. 3, lines 21-25). The gap is considered by the examiner to be the recessed portion.

“The annular gap in the housing is defined by an annular shoulder formed in the inner surface of the housing, the shoulder defines one of the first and second surfaces of the first diameter and defining a stepped annular surface of a second diameter wider than the opening and a collar member received within the second diameter in abutment against the spring”. The examiner considers the shoulder to be a support ridge, more specifically, a flange, which is a “rib or rim for strength” according to Merriam-Webster {see Reference U}. Since the shoulder forms a ring and “the contact spring 2 is maintained in axial abutment between the shoulder 18 of the bore 6 and the leading end 30 of the collar 24”(col. 3, lined 65-67), the examiner considers the portion of the shoulder that supports the first member to be the first flange and the shoulder that supports the second member to be the second flange.

As to the first, second and third positions and distances of the clip, “The sheet metal forming this spring 2 has a thickness of about 0.003 inches and is a generally closed shape member defined by opposed free ends 31 and 33, which in the relaxed condition, define a gap referenced in FIG. 5 as 29. In the assembled condition of the connector and before the lead is introduced into the opening 10, the free ends of the spring maintain a spacing of approximately 0.005 inch”(col. 4, lines 27-33). Lim discloses that the gap 29 is approximately 0.005 inch when placed in the housing, before the introduction of a lead. Therefore, the second position is at a distance of approximately 0.005 inch and a third position is at a larger distance after the insertion of

a lead. The third position will inherently create a larger gap since that will enable the spring to compress the lead.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 4, 12-16, 20 and 28-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lim (US 5,769,671). Lim discloses the claimed invention but does not disclose expressly the stainless steel. It would have been an obvious matter of design choice to a person of ordinary skill in the art to modify the metallic material as taught by Lim, with the stainless steel, because Applicant has not disclosed the stainless steel provides an advantage, is used for a particular purpose, or solve a stated problem. One of ordinary skill in the art, furthermore, would have expected the Applicant's invention to perform equally well with the metallic material as taught by Lim, because the spring could still be conductive is made from a different conductive metal.

Therefore, it would have been an obvious matter of design choice to modify metallic material and arms to obtain the invention as specified in the claim(s).

As to claims 33-48, Lim discloses the claimed invention except for two clips. It would have been obvious to one having ordinary skill in the art at the time the invention was made to create two springs, since it has been held that mere duplication of the

essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. In addition, Lim discloses the use of a spring disposed in a square shape, which is the same structure that the Applicant creates with two U-shaped clips. It would have been an obvious matter of design choice to one having ordinary skill in the art at the time the invention was made to modify the continuous square into two separate structures in order to provide a secondary means of support in the event that the spring is defective.

As to claims 12, 28 and 44, Lim discloses the claimed invention except for the overlapping of the second flange over the first flange. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the flanges as taught by Lim with overlapping flanges since it was known in the art that overlapping components can be used as a means of conserving space, especially within an implantable device since the size of the device is crucial.

As to claims 13-14, 29-30 and 45-46 the third flange is considered to be the annular locking collar 24, which can be seen in figure 6.

Conclusion

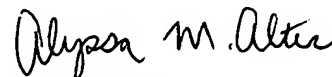
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. Crawford (US 4,848,346) discloses a pacemaker connector system.
2. Cowdery et al. (US 4,445,511) discloses a pacer electrode connector assembly.
3. Biggs et al. (US Patent Publication 20040093038 A1) discloses one piece header assembly for an implantable medical device.

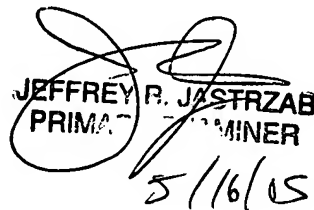
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alyssa M Alter whose telephone number is (571) 272-4939. The examiner can normally be reached on M-F 9am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (571) 272-4955. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Alyssa M Alter
Examiner
Art Unit 3762



JEFFREY R. JASTRAB
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5/16/05